

Curriculum Vitae – Linda-Maria Mårtensson

Personal information

Name: Ph D Linda-Maria Mårtensson
Date of birth: 1973-04-06
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Academic positions

Associate Senior Lecturer, Department of Biosystems and Technology (BT), Swedish University of Agricultural Sciences (SLU)	2017-02-01 –
Researcher, BT, SLU	2015-05-01 – (off duty for the benefit of Assoc. Sen. Lectureship)
Research assistant, BT, SLU (post doc II)	2014-01-08 – 2015-04-30
Research assistant, Department of Landscape Architecture, Planning and Management (LAPM), SLU (post doc I)	2013-05-15 – 2014-12-31
Teaching, Department of Biology, Lund University (LU)	2013-05
Teaching, LAPM, SLU	2012-11
Field & Laboratory assistant, Department of Biology, LU	2011-01-01 – 2011-08-15
Doctoral position, Department of Biology, LU	2006-07-01 – 2010-12-15

Other positions

Assistant coordinator, SiTES Research station Lönnstorp, BT, SLU	2015-04-01 – 2017-12-31
Internship, County Administrative Board of Skåne, Malmö	2013-02-01 – 2013-04-30
Upper secondary Teacher, Katedralskolan, Lund	2011-08-25 – 2012-08-24

Academic education

Ph D Ecology, Department of Biology, LU	2010-12-02
M Sci Environmental Science, LU	2005-06-10

Peer-reviewed original articles

Mårtensson, L-M., Carlsson, G., Prade, T. Englund, J-E. & Jensen, E.S. (submitted) *Diversification of biomass production on marginal land*
Kørup, K., Lærke, P-E., Baadsgaard, H., Andersen, M., Kristensen, K., Muennich, C., Didion, T., Jensen, E. S., **Mårtensson, L-M** & U. Jørgensen (2017) "Biomass production and plant physiological

- responses in perennial grasses during and after drought stress" *Global Change Biology Biomass* (10:12-27) DOI: 10.1111/gcbb.12464
- Mårtensson, L-M.** (2017) "Methods of establishing species-rich meadow biotopes in urban areas". *Ecological Engineering* 103:134-140
- Mårtensson, L-M.,** Carlsson, G., Prade, T., Kjørup, K., Lærke, P.E., & E.S. Jensen (2017) Water use efficiency and shoot biomass production under water limitation is negatively correlated to the discrimination against ¹³C in the C3 grasses *Dactylis glomerata*, *Festuca arundinacea* and *Phalaris arundinacea*. *Plant Physiology and Biochemistry*. DOI: 10.1016/j.plaphy.2017.01.021
- Carlsson, G., **Mårtensson, L-M.**, Prade, T., Svensson, S-E., & E.S. Jensen (2016) Perennial species mixtures for multifunctional production of biomass on marginal land. *GCB Bioenergy*. DOI: 10.1111/gcbb.12373
- Mårtensson, L-M.,** Fransson, A-M. & Emilsson, T. (2016) "Exploring the use of edible and evergreen perennials in living wall systems in the Scandinavian climate"
- Mårtensson, L-M.,** Wouluo, A., Fransson, A-M. & Emilsson, T. (2014) "Plant Performance in Living Wall Systems in the Scandinavian Climate" *Ecological Engineering* 71:610-614
- Mårtensson, L-M** & P. A. Olsson (2012) "Reductions in microbial biomass along disturbance gradients in a semi-natural grassland" *Applied Soil Ecology* 62:8-13
- Mårtensson, L-M.** & P. A. Olsson (2012) "Allocation of carbon in the grasses *Koeleria glauca* and *Corynephorus canescens* in sandy grasslands" *Applied Soil Ecology* 54:55-62
- Krone Schnoor, T., L-M. **Mårtensson** & P. A. Olsson (2011) "Soil disturbance alters plant community composition and decreases mycorrhizal carbon allocation in a sandy grassland" *Oecologia* 167:809–819
- Ödman, A., L-M. **Mårtensson**, C. Sjöholm & P. A. Olsson (2011) " Immediate responses in soil chemistry, vegetation and ground beetles to soil perturbation when implemented as a restoration measure in decalcified sandy grassland" *Biodiversity and Conservation* 20:3039-3058
- Blanck, Y-L., J. Gowda, L-M. **Mårtensson**, J. Sandberg and A-M. Fransson (2010) "Plant species richness in a natural Argentinean matorral shrub land correlates negatively with levels of plant phosphorus" *Plant and Soil* 345:11-21
- Aliasghar zad, N., L-M. **Mårtensson**, and P. A. Olsson (2010) "Acidification of a sandy grassland favours bacteria and disfavours fungal saprotrophs as estimated by fatty acid profiling" *Soil Biology and Biochemistry* 42(7): 1058-1064
- Mårtensson, L-M.** and P. A. Olsson (2010) "Soil chemistry of local vegetation gradients in sandy calcareous grasslands" *Plant Ecology* 206: 127-138
- Olsson, P. A., L-M. **Mårtensson**, and H. H. Bruun (2009) "Acidification of Sandy Grasslands – Consequences for Plant Diversity" *Applied Vegetation Science* 12: 350-361

Popular science articles

- Fransson, Emilsson, **Mårtensson**, Månsson, Kronvall & Rosenlund (2014:1) "Gröna väggar i Skandinaviskt klimat" *Movium Fakta*
- Olsson, P-A., Krone Schnoor, T., **Mårtensson, L-M.** & Ödman, A. (2010) "Med traktorgrävare i naturvårdens tjänst" *Biodiverse* 4:2010
- Mårtensson, L-M.** (2010) "Ovan jord & under ytan." *Puggehatten* 3:2010

Doctoral thesis

Mårtensson, L.-M. (2010): The influence of soil pH on plant and microbial communities in sandy grasslands, Department of Biology, Lund University, Sweden.

Book chapters

Zhu, Chang, Song, Finnan, Barth, **Mårtensson**, Jones (2016) A Systems Approach Guiding Future Biomass Crop Development on Marginal Land. In: Perennial Biomass Crops for a Resource Constrained World. Eds. Barth, S., Murphy-Bokern, D., Kalinina, O., Taylor, G., Jones, M. ISBN 978-3-319-44530-4.

Reports

GrassMargins Final Report with publishable summaries. Grant Agreement number: KBBE-2011-5-289461. Project title: Enhancing biomass production from marginal lands with perennial grasses. Coord. Dr. Susanne Barth.

Conference contributions

Mårtensson (2017) Experiences and thoughts from SITES Agroecological Field Experiment (SAFE). Agroforestry Conference 2017, Alnarp, Sweden – Talk

Mårtensson (2017) The ecology of perennial grains: First results from The SITES agroecological field experiment (SAFE) with intermediate wheatgrass (Kernza) in sole and intercrop. Agroecology Forum Europe 2017, Lyon, France – Talk

Carlsson, Ernfors, **Mårtensson** & Jensen (2016) Soil nitrogen fertility and nitrogen acquisition in faba bean – long-term systems effects. Second International Legume Society Conference (ILS2): Legumes for a Sustainable World. Tróia, Portugal – Talk (Jensen)

Ernfors, **Mårtensson** & Jensen (2016) The SITES Agroecological Field Experiment (SAFE) for long-term cropping systems research, The 14th Congress of the European Society of Agronomy on Growing landscapes; Cultivating innovative agricultural systems, Edinburgh, Scotland – Poster (Mårtensson)

Mårtensson, Carlsson, Prade & Jensen (2015) Drought tolerance and discrimination against the stable isotope ^{13}C in perennial C_3 grasses, Perennial biomass crops for a resource-constrained world, Hohenheim, Germany – Poster (Mårtensson)

Mårtensson, Ernfors & Jensen (2015) “New long-term field experiments for cropping systems research, made possible by The Swedish Infrastructure for Ecosystem Science (SITES)”, Conference on Long-term field experiments, Newcastle, UK – Poster (Mårtensson)

Ernfors, **Mårtensson** & Jensen (2015) “Lönnstorp Research Station – Part of the SITES network”, Barcoding workshop on Molecular identification of species and communities, Uppsala, Sweden – Poster (Mårtensson)

Mårtensson & Olsson (2009) “Acidification in sandy grasslands”, OIKOS meeting, Uppsala, Sweden – Poster

Mårtensson & Olsson (2008) “Vegetation transitions in sandy grasslands”, OIKOS meeting, Lund, Sweden – Poster

Mårtensson & Olsson (2007) “Mycorrhizal C allocation in Acid and Alkaline Grassland Soils”, Rhizosphere 2, Montpellier, France – Poster

Seminar presentations

- “Reporting from SLU Sweden”, GrassMargins Project partner meeting, Dublin (2014)
- “The influence of soil pH on plant and microbial communities in sandy grasslands (doctoral thesis) + future perspectives” at Risø DTU National Laboratory for sustainable energy (2010)
- “The influence of soil pH on plant and microbial communities in sandy grasslands” – Thesis defence, LU (2010)
- “What’s up in the rooting zone of *Koeleria glauca* and *Corynephorus canescens*?” by Linda-Maria Mårtensson at the section of Plant Ecology and Systematics, LU (2009)
- “How students find independent learning with teacher support” by Ann-Mari Fransson, Tim Krone Schnoor, and Linda-Maria Mårtensson at the section of Plant Ecology and Systematics, LU (2008)
- “Soil pH gradients in sandy grasslands” by Linda-Maria Mårtensson at the section of Plant Ecology and Systematics, LU (2007)

Invited talks and media communication

- Sustainable crop production, Arrendatordagen, Lunds stift (2016-02-23)
- Perennial crops and soil conservation, Sydsvenskan (2015-06-21)
- Living Walls – How and Why? City of Helsingborg (2014-10-16)
- Living Walls Varvsstaden (presenting field experiment), BiodiverCity, Malmö (2014-09-04)
- Living Walls Varvsstaden (presenting field experiment), SB HUB, Malmö (2013-08-29)
- Urban biotopes and Environmental Goals, Katedralskolan, Lund (2013-10-02)
- Guided nature trip for Hagestad Byalag, Sandhammaren (2013-07-25)
- Swedish sand steppe and soil perturbation, Swedish Public Radio “Naturmorgon” P1 (2011-10-29)
- Carbon in sandy soils, Swedish Public Radio “Naturmorgon” P1 (2010-11-06)

Commission of thrust

Referee assignments

- Applied Soil Science: 1
- Urban Forestry and Urban Greening: 1
- F1000Research: 1
- Journal of Vegetation Science: 1
- Nordic Journal of Botany: 1

Organizational

- Faculty board member, LTV faculty, SLU (2016-2018)
- Assistant Coordinator, the SITES field station Lönnstorp, Alnarp SLU (2015-2017)
- Responsible for high school students visiting for practical work experience (2007-2009)
- Ph D representative in the section board (Beredningsgruppen) (2007-2009)
- Ph D representative in the Ph D education section committee (FU-kommittén) (2007-2009)
- Coordinator for work related seminars for students in environmental science (2005-2006)

Grants

- Biodiversa/FORMAS – 5 100 000 SEK (2017)
- The Crafoord Foundation – 300 000 SEK (2016)

KSLA – A. v. Horn + S. Ahlberg 200 000 SEK (2014-12-16)
KSLA – C.F. Lundström 60 000 SEK (2014-03-28)
KSLA – Stiftelsen Akademiens kulturtekniska fond 70 000 SEK (2013-12-18)

Examination

Bachelor theses in agronomy, garden engineering and biology (SLU)
Master theses in Agroecology (SLU)

Supervision

Bachelor degree projects – Environmental Science (LU), Biology/Lantmästare (SLU)
Master degree projects – Agroecology (SLU)
Project-based research training (ongoing) – Agroecology (SLU)
Bachelor degree project – Biology (SLU), Landscape Engineering (SLU)
Master student – International project practice (LU)
Master degree project – Environmental Science (LU)

Teaching

Basic level

Sustainable development in crop production (basic level)
Soil biology in crop production (basic level)
Thesis writing in crop production (basic level)
Biodiversity in the agricultural landscape (basic level)
Supervision of seminars in general ecology, LU
Planning and supervising field exercises and projects in terrestrial ecology, LU

Advanced/Master level

Meadow habitats and artificial meadows (advanced level)
Environmental goals in crop production (advanced level)
Thesis writing in environmental issues in crop production (advanced level)

Course administration

Leading, planning and developing teaching, exercises and examination in “Environmental issues in crop production” (SLU)
Planning teaching (seminars, lectures) and examination in climate strategy (LU)
Planning and supervision laboratory and field exercises in plant and soil ecology (LU)

Pedagogic training

Research supervision, SLU, 2015 (3 w)
Course in grading and assessment, SLU, 2015 (3 d)
Workshop – the Educational Portfolio, LU, 2009 (3.5 d)
Communication in Learning and Teaching in Higher Education, LU, 2009 (2 w)
Didactics in Natural Science and Technology, LU, 2008 (3 w)
Teaching in Higher Education, LU, 2006 (2 w)
Research supervision, SLU, 2015 (3 w)
Course in grading and assessment, SLU, 2015 (3 d)
Workshop – the Educational Portfolio, LU, 2009 (3.5 d)

Communication in Learning and Teaching in Higher Education, LU, 2009 (2 w)
Didactics in Natural Science and Technology, LU, 2008 (3 w)
Teaching in Higher Education, LU, 2006 (2 w)

Other training

Career development (Diamond Cutters), SLU, 2015
Mycorrhizal symbiosis, LU, 2010
Project management, LU, 2008
Philosophy of Science, LU, 2008
Multivariate statistics, SLU, 2007
Statistics for Biologists, LU, 2006
Carbon cycling in grassland soils, LU, 2006

Other

Organised field walk in cooperation with Partnerskap Alnarp on SITES Lönnstorp (June 2015, 2016 and 2017)
Organised workshop in cooperation with Partnerskap Alnarp on SITES Lönnstorp new long-term field experiment (May 2015)
Approved application (May 2015) for workshop (Oct 2015) at Ekenäs through the Oscar and Lili Lamm foundation

Special skills

Plant, Soil & Microbial Ecology	¹³ C labelling techniques
Microbial biomass analyses (PLFA/NLFA)	Greenhouse experiments
Biogeochemical cycling	Field investigations

Personal interests

Horses & Riding, Textile crafts, Photography, Nature and Reading, Yoga, and Running

Reference persons

Erik Steen Jensen, SLU Alnarp: Erik.Steen.Jensen@slu.se (post doc II and current position)
Georg Carlsson, SLU Alnarp: Georg.Carlsson@slu.se (post doc II and current position)
Ann-Mari Fransson, SLU Alnarp: Ann-Mari.Fransson@slu.se (post doc I, colleague at LU)